2015-16 Pediatric and Adult Flu Webinar Q&A

1. Is it necessary for the patient to fill out the contraindication form if the information is already on the VIS sheet?
    a. The immunization screening questionnaires for contraindications and precautions to vaccines are different than the Vaccine Information Statement (VIS). A Vaccine Information Statement (VIS) is a document that informs the vaccine recipients or their parents/legal representative about the benefits and risks of vaccines.
    The immunization screening questionnaires help providers determine if there is any reason not to administer the vaccine today. A proper screening for true contraindications and precautions to vaccines ensures that the vaccines are safe for the patient to receive.
    Website for screening tools:
    http://www.immunize.org/handouts/screening-vaccines.asp
    Website for the Vaccine Information Statements:
    http://www.michigan.gov/mdch/0,4612,7-132-2942_4911_4914_6385-138197--,00.html

2. Has the ACIP recommended high-dose vaccine for elderly patients over the regular (standard-dose) vaccine?
    a. The Advisory Committee on Immunization Practices (ACIP) has no preference between high-dose influenza vaccine over standard-dose influenza vaccine for people aged 65 years and older. In fact, ACIP has not stated a preference for any flu vaccine product over another. The formulation and presentation a provider uses is the provider's choice. The important education point to remember is to ensure the use of an age-appropriate product and that the vaccine is administered correctly. Do not delay flu vaccination if an age-appropriate product is available today.

    Remember, we do not want to miss an opportunity to vaccinate because flu vaccine is the first and most important step to prevent influenza disease.

3. How safe is it to give FluMist for patients with allergic rhinitis who are on nasal steroids and also who have chronic sinusitis/sinus surgeries?
    a. When determining whether or not a vaccine should be administered, it is good to screen for contraindications and precautions. Live Attenuated Influenza Vaccine (LAIV) may be administered to a person with minor acute illness such as a mild upper respiratory infection with or without fever; however, clinical judgment should occur and the provider should be involved in the assessment to weigh the

risk and benefit of vaccination. If nasal congestion is present and may impede the delivery of LAIV to the nasopharyngeal mucosa than deferral of administration or use of an Inactivated Influenza Vaccine trivalent or quadrivalent (IIV3/IIV4) dose should be considered until congestion resolves. It is important to assure the nasal cavity is clear and LAIV can be administered without blockage or swelling from the nares.

Also, corticosteroid therapy usually is not a contraindication to administering live-virus vaccine when administration is:

1. Short term (i.e., <14 days)
2. A low to moderate dose (<20 mg of prednisone or equivalent per day)
3. Long-term, alternate-day treatment with short-acting preparations
4. Maintenance physiologic doses (replacement therapy)
5. Topical (skin or eyes), inhaled, or by intraarticular, bursal, or tendon injection

It is important to involve the provider in the screening process when a patient is using corticosteroid therapy.

Information on corticosteroid therapy can be found in the General Recommendations at:
http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6002a1.htm

4. When will flu vaccine will be available?
    a. Currently the flu vaccine supply is limited but it is anticipated to increase in September through November. The manufacturers are shipping to providers, pharmacies and distributors, as well as to Centers for Disease Control and Prevention CDC. Remember that as soon as the flu vaccine arrives, start administering it.

5. When flu vaccine is given in September or October, how is the patient covered for the whole flu season if the vaccine only covers about 3 months?
    a. Protection from influenza vaccine is thought to persist for a year. An annual flu vaccine is recommended because data has shown it assures the best protection. CDC recommends that seasonal influenza vaccine be administered to all age groups 6 months and older as soon as it becomes available. Antibody does wane in the months following vaccination; however, the antibody level does not necessarily correlate with clinical vaccine effectiveness. Length of protection varies depending on the person's immune system as well as what is circulating during the current flu season.

    In the study Skowronski, et al., Rapid Decline of Influenza Vaccine-Induced Antibody in the Elderly: Is it Real, or Is It Relevant? *Journal of Infectious Diseases* 2008;197:490-502; the authors found “no compelling evidence for more

rapid decline of the influenza vaccine-induced antibody response in the elderly, compared with young adults, or evidence that seroprotection is lost at 4 months if it has been initially achieved after immunization."
The review and analysis of flu vaccine effectiveness is an area that is continually looked at by the CDC and influenza experts.
CDC link: "Vaccine Effectiveness - How Well Does the Flu Vaccine Work?"
http://www.cdc.gov/flu/about/qa/vaccineeffect.htm

6. There is a warning to not use LAIV in patients with exposure to immunosuppressed people. Is there a risk of disease transmission? Does LAIV induce herd immunity?
    a. There is a theoretical risk that the live attenuated vaccine virus could be transmitted to a severely immunosuppressed individual and cause disease. ACIP recommends using inactivated influenza vaccine for household members, healthcare personnel and others who have close contact with severely immunosuppressed individuals (i.e., stem cell transplant patients) during those periods when an immunosuppressed person requires a protective environment. Persons vaccinated with LAIV should avoid contact with any person who is severely immunosuppressed for at least 7 days after receiving LAIV. There are no restrictions on being in contact with any other patients, including pregnant women.
    Healthcare personnel or other persons may receive LAIV if it is indicated based on their age and health history, even when they may have close contact with other patients that are not severely immunosuppressed.
    For further information on this topic review the MMWR:
    "Prevention and Control of Seasonal Influenza with Vaccines Recommendations of the Advisory Committee on Immunization Practices — United States, 2013–2014"
    http://www.cdc.gov/mmwr/pdf/rr/rr6207.pdf
    "Prevention and Control of Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP) — United States, 2010–11 Influenza Season" www.cdc.gov/mmwr/pdf/rr/rr5908.pdf

    Herd Immunity (also known as Community Immunity) is a situation in which a sufficient proportion of a population is immune to an infectious disease (through vaccination and/or prior illness) to make its spread from person to person unlikely. Even individuals not vaccinated (such as newborns and those with chronic illnesses) are offered some protection because the disease has little opportunity to spread within the community.
    LAIV induces an immune response in the person receiving the LAIV vaccine thus creating antibodies in that person. LAIV does lend to herd immunity by

protecting the individual that received the vaccine. If a sufficient portion of the population is vaccinated with LAIV or IIV it could lead to a community that has little opportunity to spread the disease from person to person; thus protecting others unable to be vaccinated through herd immunity.

7. I work in an internal medicine office and we see many adult patients, not any pediatric patients. We have a few adult patients that come in asking for a 1/2 dose. I have gotten it in the past, and my doctor has let me do it. How can we educate on why 1/2 doses are not recommended/advised?
    a. There is a belief by some patients that receiving a split dose/half dose of vaccine will prevent a reaction. This is not true, and this method of vaccination is not an acceptable practice. Doses of influenza vaccine (or any other vaccine) should never be split into "half doses". If a "half dose" is given it should not be accepted as a valid dose and should be repeated as soon as possible with a full age-appropriate dose.
    Administering a "half dose" or less than a full age-appropriate dose means that the person is not fully protected and could become infected with the vaccine-preventable disease. Vaccines are carefully studied and evaluated for when they should be administered (timing), age-appropriate dosage and method of vaccination to best ensure that the person will have the greatest protection from disease.

8. Can you explain the difference between ID and IM flu vaccine that is available?
    a. The difference is that ID is administered via the intradermal route and IM is administered via the intramuscular route.
    For intramuscular (IM) injections, the preferred site is the anterolateral thigh muscle of an infant or young child and in the deltoid muscle of an older child, adolescent or adult.
    For intradermal (ID) injection, the only vaccine that is licensed to be administered this way is the Fluzone Intradermal. The vaccine comes in its own manufacturer prefilled microinjection syringe. The needle is very small. When injected into the deltoid region of the upper arm, the vaccine will administer 0.1mL into the dermal layer of the skin.
    MDHHS has created a handout that details how to administer an intramuscular, intranasal and intradermal flu vaccine. The handout can be found at the MDHHS flu website.
    http://www.michigan.gov/documents/mdch/Administering_Flu_Vaccine_IM_IN_ID_081715_498073_7.pdf
    Intradermal vaccine also has a few more differences than the intramuscular IIV. Intradermal flu vaccine comes in a manufacturer prefilled syringe with a dose of

0.1 mL (a smaller dose than the standard IIV3/IIV4 at 0.5 ml). It also contains fewer antigens per strain. The standard IIV3/IIV4 contains the same quantity of hemagglutinin (15 mcg per vaccine virus strain). Fluzone Intradermal and Fluzone High-Dose (Sanofi Pasteur) contain a different amount of hemagglutinin per vaccine virus strain. Fluzone Intradermal contains 9 mcg of hemagglutinin per vaccine virus strain in a 0.1 mL dose. Fluzone High-Dose contains 60 mcg of hemagglutinin per vaccine virus strain in a 0.5 mL dose.

9. Is the CDC working on getting a flu vaccine that would be safe for infants younger than 6 months?
    a. CDC continues to research and study flu vaccine. At this time we do not have any information that manufacturers are working on a flu vaccine that would be safe for infants younger than 6 months.
    Our best protection for infants younger than 6 months is to ensure that everyone that will come in contact with the infant is vaccinated against influenza disease. We also want to be sure that all pregnant women are vaccinated against influenza to pass antibodies along to their newborn.

10. Great work with the college-aged population to increase vaccination rates. What work is being done with the elementary, middle, and high school systems to target the school-aged population (i.e., ages 5-17 years)?
    a. This is a great question. At this time we do not have a school-aged challenge in place like we do with the college-aged population. We have looked at gearing our messages and educational material regarding vaccines towards the school-aged population. We also monitor waiver rates for our school-aged population. Monitoring the immunization waiver rates can help show pockets in the population that may need more education on vaccinations in general.
    MDHHS is committed to working on awareness to influenza vaccination. We are currently working on having influenza vaccine (as well as hepatitis A) affect the overall assessment in the Michigan Care Improvement Registry (MCIR) for all persons 6 months of age and older. This would mean that MCIR would inform the providers that a person is not up-to-date if they have not yet received their flu shot during the current flu season. MCIR will display as not up-to-date until they receive flu vaccine based on the recommendations.
    MDHHS also works with providers on strategies to increase influenza vaccination rates. Some strategies are: a strong provider recommendation; ensuring all employees are up-to-date with their flu vaccine; informing patients that the office is protected; utilizing reminder & recall messages to bring patients/parents in for flu doses; ensuring eligible children receive 2 doses of flu vaccine; ensuring

obtaining vaccine is convenient and having "vaccine only" visits and use standing orders.

11. Have any of the high-dose studies been completed yet? I have heard about the ongoing studies, but have not heard any results reported.
    a. Yes, there are studies that have been done on the influenza high-dose vaccine. Here is a study published by the *New England Journal of Medicine* regarding high-dose flu vaccine (*N Engl J Med* 2014; 371:635–45). This study found that there was better protection from Fluzone High-Dose when compared to standard-dose Fluzone for persons 65 years and older, but ACIP has not stated a preference for this vaccine yet. ACIP is continually reviewing vaccine effectiveness studies, duration of immunity with flu vaccine and how this affects all ages.

12. When administering intranasal flu vaccine, should the syringe by vertical or should it be slightly angled so that the vaccine spray goes further up into the nares?
    a. LAIV, FluMist, is currently the only vaccine that is administered via the intranasal route. The vaccine dose, 0.2mL, is inside a special sprayer device. A plastic clip on the plunger divides the dose into two equal parts. The patient should be seated in an upright position. The tip of the nasal sprayer should be inserted slightly into the nostril (it does not matter if it is slightly angled); half of the contents of the sprayer (0.1mL) are sprayed into each nostril. It is important to remind the patient to breathe normally.
    MDHHS has a handout that details the administration of LAIV. The handout can be found at the MDHHS influenza website.
    http://www.michigan.gov/documents/mdch/Administering_Flu_Vaccine_IM_IN_ID_081715_498073_7.pdf

13. Why is aspirin therapy a contraindication for LAIV?
    a. Children aged 2 through 17 years receiving aspirin or aspirin-containing products should not receive LAIV. This is a contraindication for LAIV vaccine because of the associated risk for Reye's syndrome with aspirin and wild-type influenza. Avoid aspirin-containing therapy in these age groups during the first 4 weeks after vaccination with FluMist Quadrivalent unless clearly needed. Remember that the inactivated influenza vaccines have specific age groups, so be sure to select the correct age-appropriate influenza vaccine.
    b. Reye's syndrome is a rare but serious condition that causes swelling in the liver and brain. Reye's syndrome most often affects children and teenagers recovering from a viral infection, most commonly the flu or chickenpox. Aspirin has been linked with Reye's syndrome, so use caution when giving aspirin to children or teenagers. After vaccination, children may be fussy and

may have a fever. You can use acetaminophen or ibuprofen to help reduce discomfort; however do not give aspirin (due to risk of Reye's syndrome). http://www.ninds.nih.gov/disorders/reyes_syndrome/reyes_syndrome.htm

14. Which 4 pharmacies in Grand Rapids will carry the jet injector?
    a. The 4 pharmacies that will be offering the PharmaJet Needle-free injector as a method of flu vaccination this year are pharmacies in the Spartan Nash Stores in the Grand Rapids area:

        Family Fare Supermarkets
        2275 Health Dr SW
        Wyoming, MI49519-9625

        Family Fare Pharmacy
        5221 Cherry Ave
        Hudsonville, MI 49426

        Family Fare Pharmacy
        6480 28th Ave
        Hudsonville, MI 49426-8800

        D & W Fresh Market
        2022 Apple Orchard Drive
        Grand Rapids MI 49525

    We have also heard that the VA in Detroit will also be offering PharmaJet Needle-Free injections.

15. Vaccines are great, but are we as a nation going overboard with our vaccinations and as result we will be seeing a lot of people not immunizing their children?
    a. No we do not believe there are "too many" vaccines. MDHHS highly recommends all of age-appropriate vaccines across the lifespan. Immunizations prevent illness, hospitalizations and even deaths. MDHHS is committed to continual collaboration with our medical and community partners in voicing a strong vaccine recommendation and promoting the overwhelming benefits to vaccination.
    With proper information people will be able to see the benefit of vaccination. Studies have shown when people are given a strong recommendation from their healthcare provider and when all their questions have been answered that the likelihood of receiving the vaccination increases. It is our jobs as healthcare

professionals to ensure we are giving the best information and strongest recommendation for vaccines.

16. I have moms tell me if their Tdap is up-to-date then they should be passing the antibodies onto their babies while they are pregnant and shouldn't need another Tdap vaccine. Another patient had concerns about too many vaccines and if she was up-to-date for Tdap, then why vaccinate again? How would you explain both situations?
    a. Once a person is vaccinated against pertussis they are protected and only will receive one Tdap vaccination unless the person becomes pregnant. So yes, the person surrounding the pregnant woman is up-to-date for Tdap. However, the recommendation for Tdap during pregnancy is not for the pregnant mom but for the unborn child.

       The goal is to protect newborns with maternal antibodies and decrease the risk of transmission from mother to infant after birth. The ACIP recommends pregnant women receive Tdap vaccine during each pregnancy, even if the woman had received Tdap previously. The optimal time to administer Tdap is between 27 and 36 weeks gestation. Vaccination during this time maximizes maternal antibody response and passive antibody transfer to the infant. It provides the best protection for the baby.

       When a women gets Tdap vaccine during pregnancy, the maternal pertussis antibodies cross the placenta, transferring to the newborn, likely protecting the baby against pertussis early in life, before and during the time the baby is receiving his or her first three doses of DTaP vaccine (if vaccinated according to the ACIP schedule).

       For further information on Tdap vaccine and pregnancy review the recommendations for the use of Tdap in pregnancy at:
       www.cdc.gov/mmwr/preview/mmwrhtml/mm6207a4.htm